

REMARKS

Claims 97-120 are pending in the application with claims 65-67, 74, 77-81, 83-85, 87, 89, and 91-96 cancelled and new claims 97-120 added herein.

New claim 97 sets forth a capacitor that includes, among other features, a capacitor electrode containing hemispherical grain platinum formed by a described process. Claim 97 is supported at least by page 11, line 19 to page 12, line 15 of the present specification. Applicants assert that the described process of claim 97 forms the hemispherical grain platinum shown in Fig. 4 of the present specification. None of the cited references disclose or suggest hemispherical grain platinum, much less the structural features of the hemispherical grain platinum shown in Fig. 4. Such features are apparent from Fig. 4 and are further described at least by page 12, line 16 to page 13, line 21 of the present specification. Applicants acknowledge that claim 97 is a product-by-process claim and assert that it depends for patentability from the structure that results from the process described therein rather than from the described process limitations. Accordingly, claim 97 is patentable over the art of record.

The Office previously asserted that Aoki (US Patent No. 6,033,953) discloses hemispherical grain platinum. However, thorough review of Aoki reveals that it does not disclose "hemispherical grain platinum" within the meaning of such term as defined in claim 97, interpreted in light of the present specification. Specifically, regardless of the shape of convex part 38a' flattened into a spherical curved surface, such convex part 38a' is not a "hemispherical grain." Rather, as described in column 1, lines 51-57 of Aoki, convex part 38a having a sharp peak is formed when "particles of Pt adhere in a conical shape." The Aoki process

subsequently removes the peak from convex part 38a to form convex part 38a' having a curved surface as exemplified by Fig. 4A of Aoki and the text associated therewith (especially column 6, lines 26-46). Nevertheless, convex part 38a' having a curved surface remains a group of particles of Pt adhered together. Aoki does not disclose or in any way suggest some sort of processing that transforms convex part 38a' into a "hemispherical grain," within the meaning of claim 97. Accordingly, claim 97 is patentable over Aoki.


Further, review of Nakamura (US Patent No. 6,232,629) does not reveal disclosure or suggestion of hemispherical grain platinum. Applicants note that mere disclosure of columnar crystals of platinum does not disclose hemispherical grain platinum within the meaning of claim 97 and Fig. 4 of the present specification. Nakamura does not disclose and the Office has not alleged any evidence or technical reasoning that Nakamura discloses forming hemispherical grain platinum. Applicants note that Fig. 5 of the present specification describes fine grain platinum that would include columnar crystals and yet Fig. 5 does not disclose hemispherical grain platinum. Absent evidence to the contrary, Nakamura cannot be considered to disclose or suggest hemispherical grain platinum. Accordingly, claim 97 is patentable over Nakamura.

Claims 98-120 also set forth hemispherical grain platinum, in addition to other features. At least for such reason, claims 98-120 are also patentable over the art of record.

Applicant herein establishes adequate reasons supporting allowability of pending claims 97-120. Applicant requests allowance of all pending claims in the next Office Action.

Respectfully submitted,

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